ISO TC184/SC4/QC N110

Supersedes: QC N102

Date: 1999-05-12

This checklist is an annex to the document "Procedures for Internal Review." The annex is intended to provide quality assessment criteria for developers of SC4 standards. The body of the document details correspondence between the categories of criteria herein and the different types of standards produced by SC4. The current version of the document is available from the Internet Procedures for Internal Review.

Internal Review Checklist

COPYRIGHT

If the part is at Stage 4 (DIS) or higher the following items shall be examined and the box checked:

☑ 1. The copyright symbol and statement are on the bottom of page ii, they are as specified by the *Supplementary directives for the drafting and presentation of ISO 10303 (SD). (See 4.2.2 of the SD).*

Comments:

☑ 2. The correct copyright symbol appears on page 1. *(See 4.1.4 of the SD).*

Comments: as specified in QC N151

☑ 3. Each page of the document has the correct page header with the copyright symbol. *(See 4.1.1 of the SD).*

Comments: as specified in QC N151

COVER PAGE

☑ 4. The cover page has the correct format, structure and content. *(See 4.2.1 and annex A of the SD, <http://www.nist.gov/sc4/editing/cover/>, and <http://www.nist.gov/sc4/editing/cover/cov_read.htm>.)*

Comments:

☑ 5. The ballot stage (WD, CD, DIS, or FDIS), standard number (10303, 13584, etc.), part number with current ballot cycle for the ballot stage appear correctly on the cover. *(See 4.1.4 of the SD, <http://www.nist.gov/sc4/editing/cover/>, and <http://www.nist.gov/sc4/editing/cover/cov_read.htm>.)*

Comments:

☑ 6. The working group is identified at the top of the page.

Comments:

☑ 7. The N-number is present, identifies a unique document, and matches the WG document log.

Comments:

☑ 8. If the document has been updated, the 'Supersedes' field contains the previous N-number.

Comments:

☑ 9. The abstract is present and unambiguous.

Comments:

☑ 10. The abstract supports the Scope of the part and does not arbitrarily introduce new wording from that in the Scope statement.

Comments:

☑ 11. The keywords are appropriate for searches by interested parties.

Comments:

☑ 12. The copyright statement is correct for the ballot release stage of the part. WD and CD copyright statements are different than DIS and FDIS. *(See <http://www.nist.gov/sc4/editing/cover/cov_read.htm>.)*

Comments:

☑ 13. The 'Comments to Reader' box contains the required text and other text appropriate for the audience of the part during this ballot cycle. *(See <http://www.nist.gov/sc4/editing/cover/cov_read.htm>.)*

Comments:

☑ 14. The project leader and part editor are specified and are as recorded by TC 184/SC4; names, addresses, telephone/FAX numbers, and email addresses are present.

Comments: Ullrich Pfeifer is sucessor of Martin Philipp as part editor (see Re

☑ 15. The title follows the rules for upper and lower case letters. Capitalize the first letter of the first word of each element of the title. All other words shall be lower case. There are three elements of the title separated by long dashes ('em dash', ·): Introductory element · Main element · Complementary element. For example: Industrial automation systems and integration · Parts library · Part 101: Geometrical view exchange protocol by parametric program.

Comments:

☑ 16. The part number and title have been verified with the SC4 Secretariat as being the same as that registered by TC 184/SC4 for the project.

Comments:

☑ 17. The date is present in the format YYYY-MM-DD and has been updated to current date.

Comments:

TABLE OF CONTENTS

☑ 18. The table of contents (TOC) starts on page ii (left-hand side of the document). *(See 4.2.2 of the SD).*

Comments: page iii, as specified in QC N151

☑ 19. The 'Contents' heading is in bold-face and is flush left. The word 'Page' is normal-weight, flush right on the same line. *(See 4.2.2 of the SD).*

Comments:

☑ 20. 'Scope' is the first entry in the TOC. *(See 4.2.2 of the SD).*

Comments:

☑ 21. The TOC excludes terms defined in clause 3 'Terms and definitions'. *(See 4.2.2 of the SD and 6.1.2 of IDP3).*

Comments:

☑ 22. The annexes are listed immediately after the last (sub)clause in the TOC, without an intervening subheading. *(See 4.2.2 of the SD and 6.1.2 of IDP3).*

Comments:

☑ 23. The TOC entries for annexes have the following form: "Annex <letter> (<normative or informative>) <annex title> . . ." *(See 4.2.2 of the SD).*

Comments:

☑ 24. The 'Bibliography' (if present) is listed in the TOC following the last 'Annex' and before the 'Index'. *(See 4.2.2 of the SD and 6.2.1 of IDP3).*

Comments:

☑ 25. The 'Index' is present and starts on the page specified by the TOC. *(See 4.2.2 of the SD).*

Comments:

☑ 26. The 'Index' is the last entry in the TOC just before the list of figures or tables, if figures and tables are present in the part. *(See 4.2.2 of the SD).*

Comments:

☑ 27. All figures and tables have a title, presented in the correct format. (See 4.2.2, 4.5.1 and 4.5.2 of the SD).

Comments:

☑ 28. The list of figures follows the entry for the 'Index' in the TOC as specified by the *SD. (See 4.2.2 of the SD).*

Comments:

☑ 29. The list of tables follows the list of figures in the TOC. *(See 4.2.2 of the SD).*

Comments:

☑ 30. The page number is correct for each entry in the TOC.

Comments:

☑ 31. In the TOC, the list of figures is entitled 'Figures' and the list of tables is entitled 'Tables'. *(See 4.2.2 of the SD).*

Comments:

☑ 32. TOC entries have dot leaders with page numbers that follow flush right. *(See 4.2.2 of the SD).*

Comments:

The following are STEP specific:

☑ 33. In the TOC, 2-space indentation is used following clause numbers. *(See 4.2.2 of the SD).*

Comments:

☑ 34. Only clause/sub-clause headings and annex headings appear in the TOC . (See 4.2.2 of the SD and 6.2.1 of IDP3).

Comments:

FOREWORD

☑ 35. The Foreword starts with the following paragraphs. *(See 4.2.3.2 of the SD)*: "ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to

the member bodies for voting. Publication as an International Standard requires approval by at least 75% of the member bodies casting a vote."

Comments: required text according QC N151 used in document

☑ 36. The Foreword starts on a new page. *(See 4.2.3.1 of the SD).*

Comments:

☑ 37. The list of related parts is current, either through referencing the url or through including the text of the list. *(10303 parts see <http://www.nist.gov/sc4/editing/step/titles>, QC N087, and 4.2.3.2 of the SD).*

Comments: text included

☑ 38. Text identifying the standard number, part number, designation and name of the committee follows the correct format. *(See 4.2.3.2 of the SD).*

Comments:

☑ 39. Second and subsequent editions include appropriate required text as specified by the *SD. (See 4.2.3 of the SD and QC N087).*

Comments: no action required

☑ 40. All issues related to the Foreword have been resolved.

Comments:

The following are STEP specific:

☑ 41. The normative annexes specified by 4.2.3 of the SD are included.

Comments:

☑ 42. The Foreword format and required wording are correct. *(See 4.2.3.2 of the SD).*

Comments:

INTRODUCTION

☑ 43. The Introduction starts on a new page. *(See 4.2.4.1. of the SD).*

Comments:

☑ 44. The Introduction provides a high-level overview of the part. *(See 4.2.4 of the SD and 6.1.4 of IDP3).*

Comments:

☑ 45. The Introduction states the purpose of the part. *(See 4.2.4 of the SD).*

Comments:

☑ 46. The Introduction states the required knowledge necessary for understanding the part.

Comments:

☑ 47. The Introduction is unambiguous and understandable.

Comments:

☑ 48. The Introduction is consistent with the Scope. *(See 4.2.4 of the SD).*

Comments:

☑ 49. The Introduction does not imply a broader or narrower focus of types of information covered than the Scope statement.

Comments:

NOTE - The Introduction may repeat the high level description from the Scope statement.

☑ 50. If there are other documents that would aid the user in understanding the technical content of the part, they are identified and properly referenced. *(See 4.2.4. of the SD).*

Comments:

☑ 51. Informative references are cited correctly. *(See 6.6.6 of IDP3).*

Comments:

☑ 52. Informative references to normative documents are cited correctly. *(See 6.6.6 of IDP3).*

Comments:

☑ 53. The figures, tables, notes and examples are understandable.

Comments:

☑ 54. All application-specific terms used in the 'Introduction' are defined in clause 3.

Comments:

☑ 55. There are no requirements stated in the 'Introduction'. *(See 4.2.4 of the SD and 6.1.4 of IDP3).* Requirements are often indicated by the use of the word "shall". Requirements shall be in normative text only, not the Introduction.

Comments:

☑ 56. For second and subsequent editions, there is a description of the changes from the previous edition. *(See 4.2.3 of the SD and QC N087).*

Comments:

☑ 57. All issues related to the Introduction have been resolved.

Comments:

The following is STEP specific:

☑ 58. The 'Introduction' contains the required wording. *(See 4.2.3 of the SD and QC N087).*

Comments:

The following are AP specific:

☑ 59. The 'Introduction' states a high-level overview of the part and the application domain. The 'Introduction' explains the industrial need or reason for preparing this part. *(See Guidelines for the development and approval of STEP application protocols (APG) clause 4 and clause 5).*

Comments:

☑ 60. A data planning model shows the relationships of major concepts supported by this AP. *(See APG clauses 3.4.7, 4).*

Comments:

☑ 61. All relationship notation and cardinality has been removed from the lines that represent the relationships in the planning model.

Comments:

☑ 62. Relationships with other ISO TC 184/SC4 parts have been identified and briefly described.

Comments:

☑ 63. If there is planned overlap with other APs, it is indicated in the Introduction.

Comments:

SCOPE

☑ 64. The required header appears at the top of page 1. *(See 4.1.4 of the SD).*

Comments:

☑ 65. Clause 1 Scope begins on page 1. *(See 4.1.4 and 4.3.1 of the SD).*

Comments:

☑ 66. If the Scope includes a statement of applicability, it is introduced by "This International Standard is applicable to ..." or "This part of ISO sssss is applicable to ..." *(See 6.2.1 in IDP3).*

Comments: no statement of applicability

☑ 67. The part title matches the title listed by the SC4 Secretariat and registered with ISO for the project.

Comments:

☑ 68. The title follows the rules for upper and lower case letters. Capitalize the first letter of the first word of each element of the title. All other words shall be lower case. *(See 4.3.1.1 of the SD).* There are three elements of the title separated by long dashes ('em dash', ·): Introductory element · Main element · Complementary element. For example: Industrial automation systems and integration · Parts library · Part 101: Geometrical view exchange protocol by parametric program.

Comments:

☑ 69. The Scope is unambigious, conveys the purpose, and domain of the part. *(See 4.3.2.1, 6.2, 7.1, and 8.2 of the SD).*

Comments:

☑ 70. The Scope statement defines the extent of the subject matter. *(See 4.3.2.1, 6.2, 7.1, and 8.2 of the SD).*

Comments:

☑ 71. All application-specific terms are defined in clause 3.

Comments:

☑ 72. All information required to understand the context and Scope has been provided.

Comments:

☑ 73. Any necessary informative references are cited in informative text, for example, from within NOTES. *(See 4.5.3 and 4.6 of the SD and 6.6.6 of IDP3).*

Comments:

☑ 74. Informative references are cited correctly. *(See 4.6 of the SD and 6.6.6 of IDP3).*

Comments:

☑ 75. The Scope does not contain requirements. *(See 4.3.1.2 of the SD and 6.2.1 of IDP3).*

Comments:

☑ 76. The Scope does not contain introductory material that belongs elsewhere.

Comments:

☑ 77. Assumptions or policies that affect the development of the part are not contained in the Scope. These should be documented in other clauses of the part.

Comments:

☑ 78. There are no historical or time-dependent references. *(See 4.3 of the SD).*

Comments:

☑ 79. The Scope agrees with the project scope recorded by the SC4 Secretariat and registered with ISO for the project.

Comments:

☑ 80. The in-scope and out-of-scope statements have been properly separated and stated. *(See 4.3.1.2 of the SD).*

Comments:

☑ 81. Notes, examples, figures, and tables critical to understanding the Scope are provided and referenced.

Comments:

☑ 82. The Scope can be traced to requirements for the project that are in-scope for the part. *(See 4.3.1.2 of the SD).*

Comments:

☑ 83. All issues related to the Scope have been resolved.

Comments:

The following are STEP specific:

☑ 84. The font sizes are correct for the Title. *(See 4.3.1.1 of the SD).*

Comments:

☑ 85. The Scope contains the correct required text. *(See 4.3.1.2, 6.2,7.1, and 8.2 of the SD).*

Comments:

☑ 86. Types of products supported are included and easily recognized in the Scope statement. *(See 7.1 and 8.2 of the SD and 4.1 of the APG).*

Comments:

☑ 87. Types of product data are included and easily recognized in the Scope statement. *(See 7.1 and 8.2 of the SD and 4.1 of the APG).*

Comments:

☑ 88. Uses of the product data supported are included and easily recognized in the Scope statement. *(See 7.1 and 8.2 of the SD and 4.1 of the APG).*

Comments:

☑ 89. Accommodated discipline views of the product (for example, electrical versus mechanical discipline views) are included and easily recognized in the Scope statement. *(See 7.1 and 8.2 of the SD and 4.1 of the APG).*

Comments:

☑ 90. Stages in the life cycle of the product supported are included and easily recognized in the Scope statement. *(See 7.1 and 8.2 of the SD and 4.1 of the APG).*

Comments:

☑ 91. Types of products not supported are included and easily recognized in the Scope statement. *(See 7.1 and 8.2 of the SD and 4.1 of the APG).*

Comments:

☑ 92. Types of product data not supported are included and easily recognized in the Scope statement. *(See 7.1 and 8.2 of the SD and 4.1 of the APG).*

Comments:

☑ 93. Uses of the product data not supported are included and easily recognized in the Scope statement. *(See 7.1 and 8.2 of the SD and 4.1 of the APG).*

Comments:

☑ 94. Unaccommodated discipline views of the product are included and easily recognized in the Scope statement. *(See 7.1 and 8.2 of the SD and 4.1 of the APG).*

Comments:

☑ 95. Stages in the life-cycle of the product not supported by the part are included and easily recognized in the Scope statement. *(See 7.1 and 8.2 of the SD and 4.1 of the APG).*

Comments:

☑ 96. The Scope is unambiguous and understandable to engineering users, application domain experts, SC4 standardization experts, and software implementors with no STEP experience.

Comments:

The following are AP specific:

☑ 97. The Scope can be traced to in-scope information flows as documented in the AAM of the part. *(See 4.1 of the APG).*

Comments:

☑ 98. There is a reference to additional scoping material in Annex M, 'Technical discussions', if Annex M exists. The reference is made from within a Note. *(See APG 4.7).*

Comments: Annex M does not exist in AP 214

☑ 99. Notes, Examples, Figures, and Tables (for example, a data planning model) critical to understanding the Scope are provided.

Comments:

☑ 100. The required wording is included. *(See 8.2 of the SD).*

Comments:

☑ 101. Names of Units of Functionality, Application Objects and AIM elements are not included in the Scope.

Comments:

☑ 102. There are no requirements on using the AP (or the schema) specified in the Scope. The Scope is not to specify how the standard is to be used.

Comments:

☑ 103. Assumptions or policies that affect the development of the part are not contained in the Scope. These may be placed in annex M - Technical discussions.

Comments:

☑ 104. Issues on application terms raised in industry reviews have been resolved.

Comments:

The following are PLIB specific:

☐ 105. The Scope statement is complete, concise, and unambiguous, and it clearly conveys the Scope of the part in terms that are understandable to users, library managers, and implementors with little or no PLIB experience.

Comments:

☐ 106. The Scope is understandable by members of the PLIB community.

Comments:

☐ 107. The Scope contains a bulleted list beginning with "The following is (or "The following are) within the scope of this part of ISO 13584:"

Comments:

☐ 108. The in-scope list is followed by a bulleted list beginning with "The following is (or "The following are) outside the scope of this part of ISO 13584:"

Comments:

The following are view exchange protocol specific:

☐ 109. The opening paragraph of the Scope matches one of the following patterns: "This part of ISO 13584 specifies a particular representation category, called <name of category>. This representation category captures the <essence of category>. This representation category may be associated with any of the items defined in a parts library. This part of ISO 13584 also defines how representations that belong to this representation category may be exchanged within a library exchange context by means of <means used to exchange category>."

"This part of ISO 13584 specifies how representations that belong to the <name of a representation category> may be exchanged by means of <means used to exchange category>."

Comments:

☐ 110. NOTE 1 matches the following: "NOTE 1 The structure of a library delivery file is defined by a library integrated information model specified in one of the logical resource series parts of ISO 13584."

Comments:

☐ 111. NOTE 2 matches the following: "NOTE 2 The **ISO13584_f_m_iim_schema**, documented in ISO 13584-24, is a library integrated information model that defines the structure of a library delivery file. Such a library delivery file may contain instance values that reference the representation category and/or the library external files defined in this part of ISO 13584."

Comments:

NORMATIVE REFERENCES

☑ 112. All standards and technical specifications referenced in normative text have been identified in clause 2.

Comments:

☑ 113. Normative references to ISO standards that are not yet published (IS) have an em-dash in place of the year of publication, followed by a footnote marker. The footnote text states "To be published". *(See 4.3.1.3 of the SD and 6.2.2 of IDP3).*

Comments: status 2000-05-26

☑ 114. Every reference listed in clause 2 is found in normative text in a normative Clause or Annex of this part. This includes USE or REFERENCE statements in EXPRESS. Reminder: Examples and Notes are not normative.

Comments:

☑ 115. For parts at DIS or higher, all ISO standards listed in clause 2 are at least at the DIS stage (registered by ISO/CS or accepted by SC4 Secretariat for DIS ballot).

Comments:

☑ 116. Each Normative reference provides information that is intended to be part of the specification. If not, the reference shall be placed in the bibliography.

Comments:

☑ 117. For references that are not TC 184/SC4 parts, the references are complete and they identify what information shall be used (that is, is applicable clause or subclause specified) as part of the specification of this part. *(See 4.6 of the SD).*

Comments:

The following is PLIB specific:

☐ 118. The Normative references clause is introduced by the following text: "The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 13584. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 13584 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards."

Comments:

The following are STEP specific:

☑ 119. The Normative references clause is introduced by the following text. *(See 4.3.1.3 of the SD)*: "The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 10303. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 10303 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards."

Comments:

☑ 120. The format of clause 2 is correct. *(See 4.3.1.3 of the SD).*

Comments:

TERMS, DEFINITIONS, ABBREVIATIONS, and SYMBOLS

☑ 121. The title of clause 3 is one of the following. *(See 4.3.2.1 of the SD)*:

- ○ "Terms and definitions" (clause 3 contains terms and definitions only)
- ○ "Terms, definitions, and abbreviations" (clause 3 includes abbreviations)
- ○ "Terms, definitions, and symbols" (clause 3 includes symbols)

◉ "Terms, definitions, abbreviations, and symbols" (clause 3 includes abbreviations and symbols)

Comments:

☑ 122. All implementation method terms from ISO 10303-21 and ISO 10303-22 that apply to this part are included in clause 3.

Comments:

☑ 123. All application-specific terms used in normative clauses have been defined in clause 3.

Comments:

☑ 124. The 'Other terms and definitions' in clause 3 follow the layout prescribed in the *SD* and *IDP3*. *(See 3.2 of the SD and annex C of IDP3).*

"**3.2**

○ **term**
prose of definition

[ISO 13584-10:1998]" <--If this is a reference

"**3.2**
term
◉ prose of definition

NOTE Adapted from ISO 10303-1:1994" <-- If this is an adapted term.

Comments:

☑ 125. If a definition has been extracted from another document (which may be a standard), the reference is listed in the bibliography.

Comments:

☑ 126. All abbreviations have been recorded in a separate subclause in clause 3. SC4 discourages the use of abbreviations in EXPRESS names, Application Object names, and attribute names SC4 parts. *(See 5.2.2 of the SD).*

Comments: abbreviations and symbols

☑ 127. The terms listed in clause 3.n 'Other terms and definitions' are not found in other publicly available standards.

Comments:

☑ 128. The terms defined in this part are unambiguous, concise, and understandable to an engineering user, application domain expert, and software implementor using the part.

Comments:

☑ 129. The terms are listed in alphabetical order. *(See 4.3.2.1 of the SD).*

Comments:

☑ 130. All defined terms have non-circular definitions. A definition is considered circular when the term being defined appears in the definition.

Comments:

☑ 131. An attempt has been made to standardize the definitions of common terms used in this part.

Comments:

☑ 132. Explanatory notes, examples, figures and tables critical to an unambiguous understanding of each definition is provided.

Comments:

☑ 133. Each domain-specific term is used correctly.

Comments:

☑ 134. The definitions meet the 'Criteria for lexical definitions'. *(See annex C of the SD).*

Comments:

☑ 135. The required text for clause 3 is present. *(See 4.3.2.1 of the SD).*

Comments:

☑ 136. All elements of clause 3 conform to the requirements specified by the *SD. (See 4.3.2.1 of the SD).*

Comments:

☑ 137. All AP specific terms from ISO 10303-1 are listed correctly. *(See 8.4 of the SD and 4.3 of the APG).*

Comments:

☑ 138. All terms used from other TC 184/SC4 parts or standards are listed under a subclause for each part or standard. *(See 4.3.2.1 of the SD).*

Comments:

☑ 139. All definitions of terms that conflict with current definitions of other TC 184/SC4 parts have been defined in clause 3.

Comments:

The following are AP specific:

☑ 140. Each application domain term is accurate and used in accordance with the application domain terminology and usage. *(See 8.5 of the SD and 4.4 and 5.3 of the APG).*

Comments:

☑ 141. If the term has common industrial application, the definition notes whether it adheres to common industry usage or deviates from such usage.

Comments:

☑ 142. SEDS issues have been written calling for adding definitions of common terms to the appropriate general-use documents (ISO 10303-1, -21, -22, -31, etc.)

Comments: not all SEDS issues are written yet. Will follow soon

The following is PLIB specific:

☐ 143. The opening paragraph matches the following: "For the purposes of this part of ISO 13584, the following terms and definitions apply. Some of these terms and definitions are repeated for convenience from <list of all source documents>."

Comments:

ITEMS IN LISTS

Requirements on lists are described in SD 4.1.7 and IDP3 5.2.5.

☑ 144. Items in bulleted lists are preceded by a long dash ('em dash', ·). *(See 4.1.7 of the SD).*

Comments:

☑ 145. Bulleted lists are limited to a single level. *(See 4.1.7 of the SD).*

Comments:

☑ 146. Items in the first level of a numbered list are preceded by lower case letters, followed by a right parenthesis. *(See 4.1.7 of the SD).*

Comments:

☑ 147. Items in the second level of a two level or three level numbered list are preceded by arabic numerals, followed by a right parenthesis. *(See 4.1.7 of the SD).*

Comments:

☑ 148. Items in the third level of a three level numbered list are preceded by lower case roman letters, followed by a right parenthesis. *(See 4.1.7 of the SD).*

Comments:

QC strongly discourages using three level lists.

EXAMPLES

Requirements on examples are described in SD 4.5.4 and IDP3 6.5.1.

☑ 149. Each example is preceded by the word EXAMPLE.

Comments:

☑ 150. Each 'e.g.' notation has been removed from normative text and put into the EXAMPLE format. *(See 4.5.4 of the SD).*

Comments:

☑ 151. If there is more than one example in a clause or subclause, they are numbered, starting from 1, within each clause or subclause. *(See 4.5.4 of the SD).*

Comments:

NOTES

NOTE requirements are described in SD 4.5.3 and IDP3 6.5.1.

☑ 152. Each note is preceded by the word 'NOTE'. *(See 4.5.3 of the SD).* **(ISO no longer permits the use of 'NOTES' followed by a series of numbered items.)**

Comments:

☑ 153. If there is more than one NOTE in a clause or subclause, they are numbered, starting from 1, for each clause or subclause. *(See 4.1.3 and 4.5.3.2 of the SD).*

Comments:

FIGURES

Requirements for Figures are described in SD 4.5.2 and IDP3 6.6.4.

☑ 154. References to Figures are correct. *(See 4.5.2 examples are shown in 4.5.2.3 of the SD).*

Comments:

☑ 155. Figures are numbered with arabic numerals beginning with 1 and increasing sequentially throughout the document, and they are independently numbered from tables and clauses. *(See 4.5.2.2.1 of the SD).*

Comments:

☑ 156. Figure titles are centered horizontally below the figure. *(See 4.5.2 and see example in 4.5.2.2.3 of the SD)* and laid out to match the following pattern:

Figure 1 · Title of figure

Comments:

TABLES

Requirements on Tables are described in SD 4.5.1 and IDP3 6.6.5.

☑ 157. References to tables are capitalized, e.g., "... see Table 7 ..." *(See 4.5.1.3 of the SD).*

Comments:

☑ 158. Tables are numbered with arabic numerals beginning with 1 and increasing sequentially throughout the document and they are independently numbered from figures and clauses. *(See 4.5.1.2.1 of the SD).*

Comments:

☑ 159. Table titles are centered horizontally above the table as specified in 4.5.1.2 of the SDand laid out to match the following pattern:

Table 1 · Title of table

Comments:

☑ 160. Tables are laid out correctly. *(See 6.6.5 of the IDP3 and, for AP-specific guidance, 8.6.1 of the SD).*

Comments:

BIBLIOGRAPHY

☑ 161. All references to Bibliography entries are only made from informative text within this part. *(See 4.4.2 of the SD).*

Comments:

☑ 162. All normative references have been moved to clause 2.

Comments:

☑ 163. All publications used in the preparation of this part are listed in the Bibliography.

Comments:

☑ 164. Titles of the bibliographic references are italicized. *(See 4.4.2 and 4.3.1.3 of the SD).*

Comments:

☑ 165. The Bibliography (if present) is a distinct element, occurring after the last annex and before the Index. *(See 4.4.2 of the SD).*

Comments:

The following is STEP specific:

☑ 166. The Bibliography complies with the requirements specified in 4.4.2 of the *SD*.

Comments:

INDEX

☑ 167. Dot leaders are used and page numbers are flush right. *(See 4.4.3 of the SD).*

Comments:

☑ 168. There is an entry in the Index for all words that most users of the part would need to find. *(See 4.4.3, 6.7, 7.6, or 8.9 of the SD).*

Comments:

☑ 169. The index contains definiton entries, and is not a concordance. *(See 4.4.3 of the SD).*

Comments:

☑ 170. The entries in the Index are listed alphabetically. *(See 4.4.3 of the SD).*

Comments:

☑ 171. The page numbers for each entry in the Index is in fact where that entry is located on that page(s) in this part.

Comments:

☑ 172. There is an entry in the Index for the page location of each definition in clause 3.

Comments:

The following is STEP specific:

☑ 173. The Index is properly formatted as specified by 4.4.3 of the *SD*.

Comments:

The following are IR-specific as specified by 6.7 of the SD:

☑ 174. There is an entry in the Index for the page location of the EXPRESS specification of each type.

Comments:

☑ 175. There is an entry in the Index for the page location of the EXPRESS specification of each entity.

Comments:

☑ 176. There is an entry in the Index for the page location of the EXPRESS specification of each function.

Comments:

☑ 177. There is an entry in the Index for the page location of the EXPRESS specification of each rule.

Comments:

The following are AIC-specific as specified by 7.6 of the SD:

☐ 178. There is an entry in the Index for the page location of the definitions of EXPRESS elements for each type.

Comments:

☐ 179. There is an entry in the Index for the page location of the definitions of EXPRESS elements for each entity.

Comments:

☐ 180. There is an entry in the Index for the page location of the definitions of EXPRESS elements for each function.

Comments:

☐ 181. There is an entry in the Index for the page location(s) of the AIC short listing definitions.

Comments:

☐ 182. There is an entry in the Index for the page location(s) of the AIC element in the EXPRESS-G diagrams.

Comments:

The following are AP-specific as specified by 8.9 of the SD:

☑ 183. There is an entry in the Index for the page location of each UOF definition.

Comments:

☑ 184. There is an entry in the Index for the page location of each application object (AO) definition.

Comments:

☑ 185. There is an entry in the Index for the page location of each application assertion in which the AO participates.

Comments:

☑ 186. There is an entry in the Index for the page location of each AO in the mapping table.

Comments:

☑ 187. There is an entry in the Index for the page location of each AO in the ARM diagrams.

Comments:

☑ 188. There is an entry in the Index for the page location of each AIM element.

Comments:

☑ 189. There is an entry in the Index for the page location of each AIM short listing definition.

Comments:

☑ 190. There is an entry in the Index for the page location of each AIM EXPRESS expanded listing.

Comments:

☑ 191. There is an entry in the Index for the page location of each AP-specific AIM element that appears in the AIM element column of the mapping table.

Comments:

☑ 192. There is an entry in the Index for the page location of each AIM element that appears in the AIM diagrams.

Comments:

☑ 193. All AO's are included in the index.

Comments:

☑ 194. For EXPRESS AOs, the page number on which the object's definition appears is presented in bold-face.

Comments:

EXPRESS DEFINITIONS

☑ 195. The EXPRESS schema complies with the structure and required text as specified by clause 5 of the *SD*.

Comments:

☑ 196. The schema name is the first EXPRESS construct listed and the schema name is acceptable.

Comments:

☑ 197. USE FROM and REFERENCE FROM statements appear at the beginning of the schema. *(See ISO 10303-11)*

Comments:

☑ 198. EXPRESS tail comments are included after the USE FROM/REFERENCE FROM statements identifying the source of interfaced constructs. *(See 5.1.4 of the SD).*

Comments:

☑ 199. Locally defined EXPRESS constructs are listed in the proper order (i.e. constants, types, entities, rules, and functions).

Comments:

☑ 200. Referenced functions are defined.

Comments:

☑ 201. Each function is used at least once, or the justification for not using it is provided in a Note.

Comments:

☑ 202. The rules for EXPRESS usage have been applied consistently. *(See Guidelines for application interpreted model development).*

Comments:

☑ 203. The name of each EXPRESS construct is appropriate for the intent of the construct.

Comments:

☑ 204. The EXPRESS construct name is not prefixed with the schema name as specified by the *SD. (See 5.2.2.2 of the SD).*

Comments:

☑ 205. The EXPRESS construct name does not contain any abbreviations that are not included clause 3. *(See 5.2.2.4 of the SD).*

Comments:

☑ 206. Names of EXPRESS construct attributes reflect the role the type of the attribute plays in the definition of the parent entity.

Comments:

☑ 207. The names of EXPRESS constructs are nouns for entities, application objects, and attributes and verbs for actions, e.g., rules, functions.

Comments:

☑ 208. The format, structure, and organization of the EXPRESS construct are. *(See 5.1, 5.2, 5.3, and 5.4 of the SD).*

Comments:

☑ 209. The definition of each EXPRESS construct is unambiguous and understandable.

Comments:

☑ 210. The EXPRESS construct definition defines the concept. (It should not restate the EXPRESS.)

Comments:

☑ 211. The EXPRESS construct definition is grammatically correct.

Comments:

☑ 212. The EXPRESS construct definition adheres to the rules for good definitions. *(See SD annex C).*

Comments:

☑ 213. The EXPRESS declaration and definition correspond.

Comments:

☑ 214. The EXPRESS definition is consistent with the semantics of the IR that it specializes.

Comments:

☑ 215. The EXPRESS construct definition refers to outside works or other sections.

Comments:

☑ 216. Illustrations, Examples, or explanatory Notes needed to understand the EXPRESS construct definition are provided.

Comments:

☑ 217. All propositions are written as formal propositions where possible.

Comments:

☑ 218. All constraints have been moved to a supertype or global rule where possible.

Comments:

☑ 219. There are no constraints on the entity supertype that conflict with formal or informal proposition.

Comments:

☑ 220. For the schema overall, there are no name conflicts among any of the EXPRESS constructs.

Comments:

☑ 221. The schema has been compiled successfully using multiple EXPRESS compilers.

Comments:

The following are STEP specific:

☑ 222. For an AP, USE'd AICs are listed first (alphabetically), followed by USE'd resource schemas (in alphabetical order).

Comments:

☑ 223. EXPRESS constructs are listed alphabetically in each schema USE FROM (in APs and AICs)/REFERENCE FROM (in IRs) statement.

Comments:

The following are AP specific:

☑ 224. Each specialized resource construct originates from an entity listed in the USE FROM statements.

Comments:

☑ 225. For each specialized AIM element in the mapping table (i.e., source is this AP), there is an EXPRESS construct that references the correct resource construct, as specified in the reference path of the mapping tables.

Comments:

☑ 226. Each USE FROM statement element is referenced at least once in the reference paths of the mapping tables.

Comments:

☑ 227. All rules are listed in the mapping table.

Comments:

☑ 228. The rule name from the mapping table list matches the rule name in the short form. Rules are listed in the same order as the mapping table list (alphabetically).

Comments:

☑ 229. Each AIM element in the mapping table is specified in a USE FROM statement or specialized resource construct in the EXPRESS short form.

Comments:

EXPRESS-G DIAGRAMS

☑ 230. Off-page references in EXPRESS-G diagrams are consistent (i.e., these references can be followed across diagrams).

Comments:

☑ 231. Off-page references in EXPRESS-G diagrams are done correctly as specified by ISO 10303-11, annex D.

Comments:

☑ 232. All entities, attributes, enumeration types, select types, subtypes, and supertypes from the EXPRESS schemas are depicted in EXPRESS-G diagrams.

Comments:

☑ 233. The diagrams use EXPRESS-G as specified in ISO 10303-11 annex D. For STEP EXPRESS-G diagrams, defined types whose domains are base types are omitted.

Comments:

☑ 234. Heavy lines are used for supertype/subtype relationships.

Comments:

☑ 235. Dashed lines are used for optional attributes and schema to schema references.

Comments:

☑ 236. Normal lines are used for other relationships.

Comments:

☑ 237. Dashed rectangles with a left double vertical line are used for SELECT types.

Comments:

☑ 238. Dashed rectangles with a right double vertical line are used for ENUMERATION types.

Comments:

☑ 239. Dashed rectangles are used for a type.

Comments:

The following is STEP specific:

☑ 240. The EXPRESS-G complies with the required text, minimum font size, figure label, and other layout format rules as specified by the *SD.*

Comments:

AAM DIAGRAMS

☐ 241. The diagrams clearly indicate with an asterisk (*) the activities that are out-of-scope.

Comments: NO CHANGES SINCE DIS IN THIS SECTION

☐ 242. The diagrams clearly indicate with an asterisk (*) the data flows that are out-of-scope.

Comments:

☐ 243. The IDEF0 modeling methodology has been used correctly. *(See FIPS Publication 183).*

Comments:

☐ 244. Decomposition has been done correctly and is labeled appropriately.

Comments:

☐ 245. There are an appropriate number of activities (5 is recommended +/- 2).

Comments:

☐ 246. All model objects are labeled with an identifier.

Comments:

☐ 247. The in-scope information flows in the AAM can be traced to concepts listed as in-scope in clause 1.

Comments:

☐ 248. The AAM completely covers the scope.

Comments:

☐ 249. No out-of-scope activities or Inputs, Outputs, Controls, or Mechanisms (ICOMs) are found in the list of in-scope items in clause 1.

Comments:

☐ 250. Life-cycle stages referenced in clause 1 are shown on the AAM diagrams.

Comments:

☐ 251. If the intent in the scope is to provide for process or technology advances that are beyond the state of the industry practices, a to-be AAM is provided. The as-is and to-be AAMs are both provided, if required per the scope statement.

Comments:

☐ 252. There is a logical decomposition of activities and levels.

Comments:

☐ 253. There is a logical flow of activities and information in the AAM diagrams. The AAM shall not reflect any specific enterprise's method of doing business.

Comments:

☐ 254. The modeling methodology is identified, i.e. IDEF0.

Comments:

☐ 255. A summary statement of conventions is provided.

Comments:

☐ 256. Model objects have been appropriately named (verbs used for activities, and nouns used for ICOMs).

Comments:

AAM DEFINITIONS

☐ 257. The out-of-scope definitions are clearly indicated.

Comments: NO CHANGES SINCE DIS IN THIS SECTION

☐ 258. Each data activity and information flow is defined.

Comments:

☐ 259. The definitions are understandable and sufficient for the engineering users, application domain experts, and software implementors.

Comments:

☐ 260. Notes, examples, and figures critical to understanding the definitions are provided.

Comments:

☐ 261. If aliases were created for data, they are included with the definitions.

Comments:

☐ 262. The definitions are consistent with the names of activities and information flows.

Comments:

☐ 263. There is a definition for each data activity and information flow.

Comments:

☐ 264. The application domain terminology is used correctly.

Comments:

AAM TOTAL

☐ 265. All of the necessary informative references are cited and cited correctly.

Comments: NO CHANGES SINCE DIS IN THIS SECTION

☐ 266. The annotation used to identify the out-of-scope definitions is consistent with what is used in the diagrams.

Comments:

☐ 267. Reviews were conducted with industry experts other than experts that are part of the AP development team.

Comments:

☐ 268. Issues from these reviews with industry experts are documented in the issue log.

Comments:

☐ 269. Industry experts understand and agree with the AAM.

Comments:

☐ 270. All necessary information about each activity in the AAM has been provided. It was verified by industry experts.

Comments:

☐ 271. The activities in the AAM are decomposed to a level that allows the activities and the information flows to be clearly understood and accepted by industry experts.

Comments:

SCOPE AND AAM EVALUATION REPORT

☐ 272. Industry experts agree with high level description of information requirements. Any outstanding issues are documented in the project issue log.

Comments: no changes sin DIS in this section

☐ 273. A schedule of planned industrial reviews, an AP Scope and AAM summary packet, and request for participation was sent to all ISO TC184/SC4 P-member countries and to all industry organizations listed on the AP proposal.

Comments:

☐ 274. The report identifies which industries were represented at each review and when the reviews were conducted.

Comments:

☐ 275. Representatives for all disciplines that are covered in the AP scope were present at the reviews. Reviewers included individuals not on the development team.

Comments:

☐ 276. The report includes a list of the expert reviewers with their qualifications, industry affiliation, and the countries in which they have practiced their disciplines of expertise.

Comments:

☐ 277. The report includes summaries of the reviews, comments, and evaluations, and an issue log with the issues resolved.

Comments:

☐ 278. Industrial reviewers understand the scope of the AP.

Comments:

☐ 279. Industrial reviewers agree with the scope of the AP.

Comments:

☐ 280. Industry experts understand the AAM diagrams.

Comments:

☐ 281. Industry experts agree with the AAM diagrams.

Comments:

☐ 282. Industry experts understand the AAM definitions.

Comments:

☐ 283. Industry experts agree with the AAM definitions.

Comments:

☐ 284. The report includes an issue log showing how the issues have been resolved and which issues are still open.

Comments:

☐ 285. All major scope and AAM issues raised through industrial reviews have been closed.

Comments:

☐ 286. The modeling methodology is understood by industrial experts and reviewers.

Comments:

INFORMATION REQUIREMENTS

☑ 287. A high level summary of information requirements is provided.

Comments:

☑ 288. The information requirements can be traced to the in-scope information flows in the AAM.

Comments:

☑ 289. All information requirements adhere to the Scope.

Comments:

☑ 290. The information requirements are complete.

Comments:

☑ 291. The information requirements are unambiguous and understandable.

Comments:

☑ 292. Adequate illustrations have been provided. The illustrations that are provided unambiguous and helpful.

Comments:

☑ 293. Any necessary informative references are cited and cited correctly.

Comments:

☑ 294. Any necessary normative references are cited and cited correctly.

Comments:

☑ 295. There is a demonstrated industrial need for the information requirements and UoFs in clause 4 and the scope. The evidence of this Industrial need is documented in the validation report.

Comments:

UOFS

☑ 296. All UoFs adhere to the Scope.

Comments:

☑ 297. The UoF definitions exhaustively define the application (complete coverage).

Comments:

☑ 298. The UoF definitions are unambiguous and understandable.

Comments:

☑ 299. Each UoF name is appropriate to the definition. Names are sufficiently descriptive of the role and meaning of the UoF.

Comments:

☑ 300. The UoFs is a consistent whole. No UoFs overlap or conflict with other UoFs.

Comments:

☑ 301. The relationships between the UoFs are described.

Comments:

☑ 302. UoFs that are common with other APs are identified.

Comments:

☑ 303. Domain terminology and English grammar used properly.

Comments:

☑ 304. All UoFs are defined.

Comments:

☑ 305. The UoFs have the appropriate level of domain specificity.

Comments:

☑ 306. Each UoF id valid for this application domain. Each UoF representd a high level concept required by this specific application domain.

Comments:

☑ 307. The objects (entities, relationships, attributes, etc.) within the UoF, when taken together, have a distinct meaning.

Comments:

☑ 308. There are no inconsistencies in the use of ARM elements in UoFs.

Comments:

☑ 309. Industrial reviewers agree with the information requirements and UoFs.

Comments:

APPLICATION OBJECTS

☑ 310. The model objects are appropriately named.

Comments:

☑ 311. All model objects are identified.

Comments:

☑ 312. Each definition is understandable and sufficient for the required audience.

Comments:

☑ 313. Notes, examples, and figures critical to understanding the definitions are provided.

Comments:

☑ 314. Domain terminology and English grammar is used properly.

Comments:

☑ 315. All of the necessary informative references are cited and cited correctly.

Comments:

☑ 316. All of the necessary normative references are cited and cited correctly.

Comments:

☑ 317. The definitions are understandable and sufficient for the engineering users, application domain experts, and software implementors.

Comments:

☑ 318. Notes, examples, and figures that are critical to understanding the definitions have been provided.

Comments:

☑ 319. Each application object name consistent with its definition.

Comments:

ARM

☑ 320. The required wording from SD is included.

Comments:

☑ 321. The ARM diagrams are legible and structured logically for readability.

Comments:

☑ 322. The ARM objects can be traced to the in-scope data flows of the AAM.

Comments:

☑ 323. The out-of-scope data is excluded from the ARM.

Comments:

☑ 324. All the ARM objects are named. There is a corresponding application object for each object in the ARM diagram.

Comments:

☑ 325. The names of the ARM objects are appropriate. The attribute names make sense when read with the corresponding entity name. The names correspond with the definitions.

Comments:

☑ 326. The ARM includes all information modeling constructs required by the modeling method used, i.e., EXPRESS-G, or IDEF1X.

Comments:

☑ 327. The ARM modeling methodology identified in a note.

Comments:

APPLICATION ASSERTIONS

☑ 328. Each assertion constrains defined application objects. The cardinality of the relationship specified.

Comments:

☑ 329. There is an assertion for every relationship among ARM objects on the ARM diagrams.

Comments:

☑ 330. Specific conventions for the chosen modeling methodology have been followed. (If the ARM is modelled in EXPRESS, SELECT types are listed.)

Comments:

ARM VALIDATION REPORT

☑ 331. The report provides a summary of the ARM validation test plan and the validation results.

Comments:

☑ 332. The information requirements were validated through the following method:

- ○ data base population and query;
- ◉ paper population and reference path analysis; and/or
- ○ prototype implementation.

Comments: also prototype implementation

☑ 333. ARM validation coverage was assessed. Sufficient coverage was achieved.

Comments:

☑ 334. The AP issues log has been maintained and it is provided with the AP Validation Report.

Comments:

☑ 335. All issues raised against the ARM have been resolved satisfactorily.

Comments:

☑ 336. The experts who contributed to the technical review of the AP and the industries that they represent are identified (to ensure that there has been adequate industry representation).

Comments:

☑ 337. The validation test plan was followed.

Comments:

☑ 338. Example parts or usage scenarios were used to validate the ARM.

Comments:

☑ 339. The rationale for the selection of the example parts and usage scenarios is presented.

Comments:

☑ 340. All UoFs validated. If not why not.

Comments: adequate test cases for some UoF were not available

☑ 341. All members of the AP development team have reviewed and accepted the ARM.

Comments:

Industry application expert acceptance:

☑ 342. All the industry organizations specified in the AP project summary were included in the ARM review.

Comments:

☑ 343. The ARM diagrams are understandable to the application expert reviewers.

Comments:

☑ 344. The ARM uses application specific terminology and rules agreed to by industry experts.

Comments:

☑ 345. Industry experts agree that the ARM represents industry's information requirements.

Comments:

☑ 346. The UoFs are understandable and accepted by industry experts.

Comments:

☑ 347. The ARM appears to be independent from implementation constraints, e.g., exchange structure, SDAI.

Comments:

INTEGRATED RESOURCES INTERPRETATION REPORT

☐ 348. The interpretation report adequately describes the high-level decisions that were made during the interpretation process.

Comments: Requirement for Integrated resources interpretation report did nc

☐ 349. References to the integrated resources identify the N-number and date.

Comments:

☐ 350. The integrated resource entities that fully satisfy application requirement have been listed. This list agree with USE statements in clause 5.2, EXPRESS short form.

Comments:

☐ 351. Template structures from ISO 10303-41 annex C have been used consistently where needed.

Comments:

☐ 352. The rationale for choosing one integrated resource construct over another has been documented.

Comments:

☐ 353. The need for specialization of Integrated Resource constructs has been documented (explanations should include a short synopsis of the AP's need). These specializations match those referenced in the EXPRESS short form.

Comments:

☐ 354. Structural (e.g. subtypes, attributes, and select types) specializations of resource constructs have been identified. They match those referenced in the mapping table.

Comments:

☐ 355. Specializations have been agreed to and reviewed by WG12 and the AP Project team.

Comments:

☐ 356. The specialization is consistent with the intent of the resource entity.

Comments:

☐ 357. The rules for application interpretation of integrated resource constructs have been applied consistently. *(See Guidelines for AIM development).*

Comments:

MAPPING TABLE

☑ 358. The mapping table complies with the structure and required text specified in the *SD* and *Guidelines for development of mapping tables*.

Comments:

☑ 359. The mapping table is organized alphabetically by UoF and then alphabetically by application object within the UoF.

Comments:

☑ 360. Each UoF is included and is mapped in a sub-table within the mapping table.

Comments:

☑ 361. Each application object (AO), AO attribute, and application assertion specified in clauses 4.2 and 4.3 of the AP appear in the left-hand column of the ARM to AIM mapping table.

Comments:

☑ 362. There is at least one AIM element listed for each mapping.

Comments:

☑ 363. The source part number for the AIM element is identified.

Comments:

☑ 364. Each AIM element whose source is an IR or AIC is listed in a USE FROM statement in clause 5.2, the AIM short form.

Comments:

☑ 365. There is an AIM element in the mapping table for each application specialization in clause 5.2, the AIM short form. The AP part number is listed in the Source for each one.

Comments:

☑ 366. Product_context and application_context are included as AIM elements except when these are included through an AIC. *(ISO 10303-41 requirement, see 6.4 and 5.3 respectively).*

Comments:

☑ 367. For each entry in the mapping table, reference paths use proper notation per *Guidelines for development of mapping tables*.

Comments:

☑ 368. An alphabetical listing of rules is provided at the end of the mapping table.

Comments:

☑ 369. Each rule number is used at least once in the rule column of the mapping table.

Comments: see PL checklist: Each Rule in the mapping table is found in clau

☑ 370. There is an explicit reference provided in a USE FROM if the AIM element is a function or a rule.

Comments:

☑ 371. Each application specific rule in the AIM short form is referenced in the list of rules at the end of the mapping table.

Comments:

AIM EXPRESS EXPANDED LISTING

☑ 372. All SUBTYPEs or SELECTs belonging to USE FROM constructs are used.

Comments: there are few explicit USEFROM, which are not used in the map

☑ 373. All entities of a SELECT type in the long form equal those entities in the USE FROM of the short form in scope.

Comments:

AIM SHORT NAMES

☑ 374. Unique abbreviations were generated using the STEP name repository (NIST maintains this.).

Comments:

☑ 375. The table format and required wording conform to the *SD* for AIM short names (4.8.1.2).

Comments:

AIM VALIDATION REPORT

☑ 376. Sample test pieces, notes, examples, and figures that are critical to understanding the AIM Validation Report are provided.

Comments:

☑ 377. The AIM has been populated with the same test casses that were developed for the ARM.

Comments: Not in all cases

☑ 378. The sample test cases and data support the defined constraints.

Comments:

☑ 379. The AIM provides access paths to support usage in realistic applications and application requirements.

Comments: real world cases were used

CONFORMANCE CLASSES AND CONFORMANCE REQUIREMENTS

☑ 380. Necessary informative references are cited and cited correctly.

Comments:

☑ 381. The conformance requirements are numbered sequentially starting with 1.

Comments:

☑ 382. The conformance requirements are understandable.

Comments:

☑ 383. The conformance requirements are sufficient to meet the requirements of industry.

Comments:

☑ 384. The conformance requirements are consistent with the scope and information requirements.

Comments:

☑ 385. The required wording and table format conform to 4.8.1.2 of the *SD*.

Comments:

☑ 386. There is a distinct boundary established for each conformance class.

Comments:

☑ 387. Each AIC used is specified in the conformance class definition.

Comments:

☑ 388. If there are any options identified, each option identifies the AIM elements to which it applies.

Comments:

☑ 389. Conformance class definitions adhere to the standards of proper grammar.

Comments:

☑ 390. The conformance requirements are independent of implementation method.

Comments:

PICS PROFORMA

☑ 391. The required wording and format conform to 4.8.1.4 of the *SD*.

Comments:

☑ 392. The PICS is consistent with the conformance classes and options.

Comments:

IMPLEMENTATION METHOD SPECIFIC REQUIREMENTS

☑ 393. All of the necessary informative references are cited and cited correctly.

Comments:

☑ 394. These implementation requirements are understandable and consistent with the normative references.

Comments:

AP IMPLEMENTATION AND USAGE GUIDE

☑ 395. All of the necessary informative references are cited and cited correctly.

Comments:

☑ 396. The usage guide is understandable and consistent with the rest of the AP.

Comments:

☑ 397. The understandability and the utility of the usage guide have been tested in multiple production environments.

Comments:

☑ 398. The original reviewers of the scope and information requirements used and reviewed the usage guide.

Comments:

☑ 399. All issues raised against the usage guide have been resolved.

Comments:

AP VALIDATION REPORT

☑ 400. All deficiencies in previous editions of the AP have been resolved.

Comments:

☑ 401. All problems have been resolved to ensure consistency of usage of AICs with other APs.

Comments:

TECHNICAL DISCUSSIONS

☑ 402. Any necessary informative references are cited and cited correctly. Referenced documents help explain the issues or how they were used to reach a decision.

Comments:

☑ 403. The discussion presents an issues and resolutions that were significant to the AP development important to the understanding of the part.

Comments:

☑ 404. The issue idiscussion is understandable by someone not involved in the part's development.

Comments:

☑ 405. The issue discussion sheds light on the reason for the development of the part or on technical decisions made during the development.

Comments:

☑ 406. The discussions contribute to the technical understanding of the content of the part.

Comments:

☑ 407. The technical discussion is more than a summary of issues against the part.

Comments:

☑ 408. If the discussion concerns the relationship between this part and another part, the other part appropriately referenced.

Comments:

☑ 409. If illustrations or examples are needed, they are included and they are understandable.

Comments:

☑ 410. The discussion includes a list of alternatives and choices examined, the pros and cons of alternatives, an assessment of impact internally and externally, a resolution and reasons for selecting the alternative for the resolution.

Comments:

☑ 411. The resolution of the issue satisfy an industrial need of the AP. The resolution is consistent with the stated scope of the AP.

Comments:

☑ 412. The discussion/issue resolution is independent of any hardware/software/application considerations (such as implementation levels).

Comments:

☑ 413. The rationale for choosing a resolution considers legal aspects. It avoids favoring any particular group, company or implemented system.

Comments:

☑ 414. The format adheres to the *SD*.

Comments:

ISSUES LOG

☑ 415. The issues log is up-to-date with the version of the document under reviewed.

Comments:

☑ 416. Issues have been documented and reviewed on a routine and recurring basis.

Comments:

☑ 417. There are no major technical issues remaining open or deferred.

Comments:

☑ 418. There are no minor technical issues remaining open or deferred.

Comments:

☑ 419. All issues were resolved without impacting the scope of this part or other elements of this document.

Comments:

☑ 420. Issues have been resolved to the satisfaction of the development team.

Comments:

☑ 421. Issues have been resolved to the satisfaction of the review team and other industrial reviewers.

Comments:

APPROVAL

I have reviewed and verified the items on this document for:

Standard 10303 Part 214 Stage FDIS WG 3 N 931
Name Ullrich Pfeifer Date 2000-06-07

To save a partially complete form for completion in another session:
1) select the "Return an editable Form" radio button,
2) press the save button at the bottom of the form and wait for the new form to return, then
3) use the File|Save option in your browser.
The saved form is editable and may be re-submitted.

To save a completed form for submission:
1) select the "Return a static Form" radio button,
2) press the save button at the bottom of the form and wait for the new form to return, then
3) use File|Save in your browser.
The saved form is less susceptible to mod ification. The saved, completed form may be emailed to the sign-off exploder (s ign-off@cme.nist.gov). This step will be automated in the future.

Save

○ Return a static Form ◉ Return an editable Form

Send mail to the Quality Committee.